

## Letter to the Editor

# The Effect of COVID-19 on Radiation Oncology Professionals and Patients With Cancer: From Trauma to Psychological Growth

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*To the Editor:*

The outbreak of severe acute respiratory syndrome coronavirus-2 and the coronavirus disease 2019 (COVID-19) pandemic represent an international public health emergency.<sup>1</sup> Patients with cancer are at higher risk of developing severe COVID-19 manifestations and hence the whole clinical decision-making process for oncological care is being revised, to balance the risk–benefit ratio for each treatment offered to patients.<sup>2–6</sup> This scenario forces health care providers, including radiation therapy professionals, to undergo substantial reorganization in terms of staffing, resources, working processes, treatment allocation, and delivery and safety measures.<sup>7,8</sup> This situation is supposed to have practical and psychological consequences for both patients with cancer and healthcare workers. This is even magnified on a personal level because the response required by the COVID-19 pandemic calls for draconian measures (quarantine for entire communities, social isolation), which are a potential source of further distress.<sup>9,10</sup> Individuals facing traumatic events usually experience distressing emotions such as anxiety, sadness, guilt, and anger. For healthcare providers, an important stressor is related to the fear of being exposed to severe acute respiratory syndrome coronavirus-2 at hospital and the consequent anxiety of bringing the infection home.<sup>9</sup> For patients with cancer, the fear of

being infected adds to the cancer condition, which represents *per se* a traumatic event. Exposure to trauma is usually associated to psychological distress and trauma- and stressor-related disorders such as posttraumatic stress disorder. High levels of posttraumatic stress disorder were observed among medical staff during the H7N9 avian flu outbreak.<sup>11</sup> Nevertheless, the presence of negative consequences in the aftermath of the trauma does not exclude the possibility of developing positive outcomes thereafter.<sup>12,13</sup> Indeed, trauma can be a fertile ground for an unexpected outcome observed in survivors: posttraumatic growth (PTG). PTG refers to “positive psychological change experienced as a result of the struggle with highly challenging life circumstances.”<sup>14</sup> The Posttraumatic Growth Inventory is the most reliable measure to evaluate the positive change following a traumatic event. It measures 5 domains: (1) appreciation of life, (2) intimate relationships with others, (3) sense of personal strength, (4) recognition of new possibilities, and (e) spiritual change.<sup>15</sup>

Growth, however, does not occur as a direct result of trauma. Different factors could foster the development of PTG. They are related to sociodemographic features such as age (higher growth for younger individuals), personality characteristics (extraversion, open-mindedness to experience), and coping strategies to manage distressing emotions. Also crucial is the activation of a cognitive processing allowing individuals to disengage with previous core beliefs and to build new schemas and meanings. Eventually, the presence of social support can help in elaborating narratives about the traumatic event experienced.<sup>14</sup>

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In conclusion, traumatic and stressful events, like the COVID-19 pandemic, have definitely negative acute effects, but can lead to mid- to long-term positive outcomes. Hence, both healthcare providers and patients with cancer should be supported whenever experiencing psychological distress or difficulties in changing personal cognitive beliefs or struggling as a result of a lack of social help. This is important to foster the process of positive growth.

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